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FYI

December 1996

Number 36



Forecast Discussion Bulletins

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FYI

Information for Air Force Weather (AFW)

Number 36
December 1996

Contents of this issue of FYI

Introduction	1
Purpose	2
Applications	2
Conclusion	2
Hemispheric-Scale and Synoptic-Scale Forecast Discussion Bulletins	A-1
Mesoscale and Local/Storm-Scale Discussion Bulletins	B-1

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Forecast Discussion Bulletins

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INTRODUCTION

Forecast discussion bulletins should play an important part in your Local Analysis and Forecast Program (LAFP). In addition to providing a wealth of information, they are an excellent training tool. The discussions can quickly bring you up to speed on a developing situation, offer insight on a parameter you may have overlooked, introduce you to a new forecasting technique, or simply keep you from straying too far off the path. Remember, even though these discussions are just another forecaster's opinion, they are still a valuable source of information. This FYI lists some of the discussion bulletins currently available and suggests how to include them in your forecast process.

Forecasters from the National Weather Service (NWS), Air Force, and Navy produce bulletins using weather data not routinely available at the base weather station.

PURPOSE

Why bother reading forecast discussion bulletins? First, they provide a wealth of information. Forecasters from the National Weather Service (NWS), Air Force, and Navy produce bulletins using weather data not routinely available at the base weather station. Second, many of these bulletins offer another opinion on the forecast. Therefore, they can validate your thought process or, if you disagree, prompt you to investigate the situation further to substantiate your forecast. Finally, they are an excellent training tool, particularly for the inexperienced forecaster.

APPLICATIONS

Discussion bulletins fit right into a unit's forecast process as a direct input into the "forecast funnel." You'll recall the forecast funnel helps you take a large amount of data and systematically reduce it into forecast elements within your TAF. The funnel directs your thought process downward from the largest to the smallest scales of atmospheric motion: from hemispheric, to synoptic, to meso, to local/storm. Because forecast discussion bulletins usually focus on just a couple of scales, such as the hemispheric/synoptic or the mesoscale/storm scale, they are convenient tools to aid you in your evaluation. To help integrate forecast discussion bulletins into the forecast process, we've grouped them according to where they would best fit within the funnel.

OTHER DEFINITIONS

PID: AWDS Alphanumeric Product Identifier

MANOP: Manual Operations (Generic Bulletin Header Description)

UTC: Coordinated Universal Time

Hemispheric-Scale and Synoptic-Scale Discussion Bulletins

The hemispheric scale guides the synoptic scale. Use these discussion bulletins to get an overall impression of the "big picture," help you identify the proper regime, and begin to develop a forecast problem of the day. These discussion bulletins are listed starting on page A-1.

Mesoscale and Local/Storm-Scale Discussion Bulletins

The mesoscale is "where the action is" and what is driving the local/storm scale. Use these discussion bulletins to help identify mesoscale characteristics of the weather regime and identify the forecast problem of the day such as fog, thunderstorms, and non-convective winds. These discussion bulletins are listed starting on page B-1.

Again, the forecast funnel leads you through a logical progression from the hemispheric scale to the local or storm scale. The forecast funnel is the best way we know to organize this wealth of data when producing your forecast.

CONCLUSION

This FYI lists forecast discussion bulletins available to AFW forecasters and emphasizes the importance of incorporating them into your LAFP. You can access these bulletins through a variety of sources such as the Automated Weather Distribution System (AWDS), Air Force Weather Information Network (AFWIN), or the Internet. While we've made every attempt to make the list as comprehensive as possible, it by no means includes every discussion bulletin out there. If you use or know of a forecast discussion bulletin we haven't included, please let us know.

✓ HEMISPHERIC-SCALE AND SYNOPTIC-SCALE FORECAST DISCUSSION BULLETINS

This listing does not include discussion bulletins produced for contingency operations. When deployed or forecasting for a remote location, you will want to consider discussion bulletins created for that location.

Use the space at the end of this appendix to add other beneficial discussion bulletins you find.

NAVPACMETOCCEN WEST's Arabian Sea, Bay of Bengal, Northwest Pacific, China Sea, and Tropics Prognostic Discussion

Produced by forecasters at the Naval Pacific Meteorology and Oceanography Center West (NAVPACMETOCCEN WEST) twice a day and should be available after 0100 and 1300 UTC.

MANOP Header **AWDS PID**
FNXE26 PGFW AA8953

AFGWC's European Theater Synoptic Discussion Bulletin

Produced by forecasters at AFGWC's Eastern Region Forecast Branch once a day and should be available after 0200 UTC.

MANOP Header **AWDS PID**
FOXX20 KGWC AA5310

Korean TFU's South Korean Synoptic Discussion Bulletin

Produced twice a day by forecasters in the Korean Theater Forecast Unit (TFU), this 24-hour outlook for South Korea should be available after 0900 and 2100 UTC.

MANOP Header **AWDS PID**
FOXX60 RKSZ AA4220

Korean TFU's Extended Forecast Discussion for Korea

Produced by forecasters in the Korean TFU, this is a 24- to 120-hour outlook for the Korean Peninsula, issued twice a day, and should be available after 0300 and 1500 UTC.

MANOP Header **AWDS PID**
FOXX61 RKSZ AA4224

Korean TFU's North Korean Synoptic Discussion Bulletin

Produced twice a day by forecasters in the Korean TFU, this 24-hour outlook for North Korea should be available after 0900 and 2100 UTC.

MANOP Header **AWDS PID**
FOXX63 RKSZ AA4227

HPC's 12- to 48-Hour Prognostic Discussion for the CONUS

Produced by the National Centers for Environmental Prediction's (NCEP) Hydrometeorological Prediction Center (HPC) twice a day, available after 0700 and 1900 UTC.

MANOP Header **AWDS PID**
FXUS01 KWBC AA0793

This discussion bulletin references HPC-produced vector-graphic charts. The 12- and 24-hour charts are available after 0600 and 1800 UTC while the 36- and 48-hour charts are available the same times as the discussion bulletines. AWDS PIDs, database times (DBT), and product legends for these charts are provided below. Note the 12- and 24-hour charts are also produced around 0900 and 2100 UTC, but no discussion bulletin accompanies these charts.

AWDS PID	DBT	Product Legend
HVFSNA0X94	0000	NWS N.A. 12HR FNT-MSL PRES PROG
IVFXNA0XX4	0000	NWS N.A. 12HR INSTANT PRECIP PROG
IVFXNA0YX4	0000	NWS N.A. 12HR LO-LVL WX DEP (CIG/VIS) PROG
HVFSNA0X9A	0000	NWS N.A. 24HR FNT-MSL PRES PROG
IVFXNA0XXA	0000	NWS N.A. 24HR INSTANT PRECIP PROG
IVFXNA0YXA	0000	NWS N.A. 24HR LO-LVL WX DEP (CIG/VIS) PROG
HVFSNA0X99	0000	NWS N.A. 36HR FNT-MSL PRES PROG
IVFXNA0UX9	0000	NWS N.A. 36HR CLOUD PCPN PROG
HVFSNA0X9B	0000	NWS N.A. 48HR FNT-MSL PRES PROG
IVFXNA0UXB	0000	NWS N.A. 48HR CLOUD PCPN PROG
HVFSNA4X94	1200	NWS N.A. 12HR FNT-MSL PRES PROG
IVFXNA4XX4	1200	NWS N.A. 12HR INSTANT PRECIP PROG
IVFXNA4YX4	1200	NWS N.A. 12HR LO-LVL WX DEP (CIG/VIS) PROG
HVFSNA4X9A	1200	NWS N.A. 24HR FNT-MSL PRES PROG
IVFXNA4XXA	1200	NWS N.A. 24HR INSTANT PRECIP PROG
IVFXNA4YXA	1200	NWS N.A. 24HR LO-LVL WX DEP (CIG/VIS) PROG
HVFSNA4X99	1200	NWS N.A. 36HR FNT-MSL PRES PROG
IVFXNA4UX9	1200	NWS N.A. 36HR CLOUD PCPN PROG
HVFSNA4X9B	1200	NWS N.A. 48HR FNT-MSL PRES PROG
IVFXNA4UXB	1200	NWS N.A. 48HR CLOUD PCPN PROG

HPC's Extended Forecast Discussion for the CONUS

Produced by NCEP's HPC forecasters once a day, available after 1900 UTC. On 7 Jan 97, HPC will expand this bulletin to include a discussion of the mean circulation patterns and the significant features expected to impact Alaska and Hawaii.

MANOP Header **AWDS PID**
FXUS02 KWBC AA8634

NAVEURMETOCCEN's Mediterranean Prognostic Discussion

Produced by forecasters at the Naval European Meteorology and Oceanography Center (NAVEURMETOCCEN) twice a day, available after 0100 and 1300 UTC.

MANOP Header **AWDS PID**
PDME1 LERT AA4586

NAVLANTMETOCCEN's Atlantic Prognostic Discussion

Produced by Naval Atlantic Meteorology and Oceanography Center (NAVLANTMETOCCEN) forecasters twice a day, available after 0400 and 1600 UTC.

MANOP Header **AWDS PID**
PDNT KNGU AA4253

FLENUMMETOCCEN's NOGAPS Model Summary for the North Atlantic and Mediterranean

Produced by the Navy's Fleet Numerical Meteorology and Oceanography Center (FLENUMMETOCCEN) twice a day, available after 1000 and 2200 UTC.

MANOP Header **AWDS PID**
PDNT1 KNWC AA1940

FLENUMMETOCCEN's NOGAPS Model Summary for the North Pacific and Indian Oceans

Produced by FLENUMMETOCCEN twice a day, available after 1000 and 2200 UTC.

MANOP Header **AWDS PID**
PDPN1 KNWC AA4945

Produced by Naval Pacific Meteorology and Oceanography Center (NAVPACMETOCCEN) forecasters twice a day, available after 0100 and 1300 UTC.

Other Hemispheric-Scale and Synoptic-Scale Discussion Bulletins

[illegible]

[illegible]

MESOSCALE AND LOCAL/STORM-SCALE DISCUSSION BULLETINS

Discussion bulletins without an AWDS PID are not currently available via the Automated Weather Network (AWN), but can be if a weather unit requests Detachment 7, AFGWC add it to the Master Distribution Library. See AFCAT 15-152, Volume 3 for instructions on requesting data from the AWN data requirements.

This listing does not include discussion bulletins produced for contingency operations. When deployed or forecasting for a remote location, you will want to consider discussion bulletins created for that location.

Use the space at the end of this appendix to add other beneficial discussion bulletins you find.

JTWC's Indian Ocean Tropical Cyclone Discussion

Produced by the Joint Typhoon Warning Center (JTWC), Guam, once a day, available after 1800 UTC and updated when necessary.

MANOP Header	AWDS PID
ABIO10 PGTW	AA2952

NHC's Atlantic Tropical Weather Outlook

Issued by the National Hurricane Center (NHC), Florida, four times a day during hurricane season, available after 0100, 0700, 1300 and 1800 UTC.

MANOP Header	AWDS PID
ABNT20 KHNC	AA1917

CPHC's Central Pacific Tropical Weather Outlook

Produced by Central Pacific Hurricane Center (CPHC), Hawaii, twice a day during hurricane season, available after 1000 and 2200 UTC.

MANOP Header	AWDS PID
ABPA20 PHNL	AA3309

JTWC's Western North Pacific Cyclone Discussion

Produced by JTWC once a day, available after 0600 UTC and updated when necessary.

MANOP Header **AWDS PID**
ABPW10 PGTW AA2590

NHC's Eastern Pacific Tropical Weather Outlook

Produced by NHC four times a day during hurricane season, available after 0200, 0800, 1400, and 2000 UTC.

MANOP Header **AWDS PID**
ABPZ20 KHNC AA1918

SPC's Convective Outlook for the CONUS

Produced by NCEP's Storm Prediction Center (SPC) forecasters, this bulletin covers the period from 1200 UTC the day it is issued to 1200 UTC the following day. This is produced four times a day and should be available after 0600 UTC (the initial day-1 outlook), 1500 UTC (the "morning update," valid until 1200 UTC the next day), 1900 UTC (the "afternoon update," valid until 1200 UTC the next day), and the 0200 UTC (the "evening update," valid until 1200 UTC the following day).

MANOP Header **AWDS PID**
ACUS1 KMKC AA4799

This discussion bulletin references a SPC-produced vector-graphic chart also available after 0600 UTC (initial outlook). The AWDS PID, database time (DBT), and product legend for this chart are provided below. Note, no vector graphic charts are produced for the 1500, 1900, and 0200 UTC updates.

AWDS PID	DBT	Product Legend
HVFSUS0SS4	0000	NWS CONUS CONVECTIVE OUTLOOK DAY 1

SPC's Severe Thunderstorm and Tornado Watch Notifications for the CONUS

This bulletin is produced by forecasters at NCEP's SPC and is only issued when a watch is issued. Each bulletin contains a paragraph (paragraph "d") that discusses the factors that support the watch being issued.

WMO Header **AWDS PID**
WWUS9 KMKC AA3007

AWC's Convective SIGMETs for the CONUS and Adjacent Coastal Waters

These bulletins are produced hourly by forecasters at NCEP's Aviation Weather Center (AWC) and are updated when required. Whenever a convective SIGMET is in effect, the bulletin contains an outlook of up to 6 hours. When no convective SIGMET is in effect, a bulletin is still issued to state none is in effect. Convective SIGMETs issued for the eastern third of the CONUS (east of 87° W longitude) use the WSUS40 header; the central third (between 87° and 107° W longitude), the WSUS41 header; and the western third (west of 107° W longitude), the WSUS42 header.

WMO Header	AWDS PID
WSUS40 KMKC	AA4646
WSUS41 KMKC	AA4646
WSUS42 KMKC	AA4647

SPC's Second-Day Severe Outlook for the CONUS

Produced by NCEP's SPC forecasters, this bulletin covers the period from 1200 UTC the following day to 1200 UTC the third day. This is produced twice a day and should be available after 0800 (the initial day-2 outlook) and updated at 1800 UTC.

MANOP Header	AWDS PID
ACUS2 KMKC	AA4801

This discussion bulletin references a SPC-produced vector-graphic chart also available after 0800 UTC. The AWDS PID, DBT, and product legend for the chart are provided below. Note, no chart is produced for the 1800 UTC update.

AWDS PID	DBT	Product Legend
HVFSUS0SS9	0000	NWS CONUS SVR STORM OUTLOOK DAY 2

SPC's Mesoscale Discussion for the CONUS

Produced by NCEP's SPC, this is issued only when needed (generally whenever severe thunderstorm/tornado watches have been issued or are about to be issued).

MANOP Header	AWDS PID
ACUS3 KMKC	AA4802

NWS's State/U.S. Possession Forecast Discussions

Produced by forecasters at the NWS' Weather Forecast Offices (WFO) throughout the CONUS, Alaska, Hawaii, and Puerto Rico, four times a day. Issue times vary with the WFO.

MANOP Header	AWDS PID	MANOP Header	AWDS PID
FPAK20 PANC	AA3718	FPUS3 KLAX	AA6574
FPAK20 PAJN	AA7858	FPUS3 KLBB	AA2461
FPAK20 PAFA		FPUS3 KLIT	AA4545
FPCA3 TJSJ	AA2475	FPUS3 KMEM	AA4544
FPHW3 PHNL	AA8861	FPUS3 KMIA	AA2851
FPUS3 KABQ	AA2214	FPUS3 KMKE	AA2469
FPUS3 KALB	AA5506	FPUS3 KMSP	AA7496
FPUS3 KAMA	AA2011	FPUS3 KNEW	AA2870
FPUS3 KARB	AA7396	FPUS3 KNYC	AA5510
FPUS3 KATL	AA2434	FPUS3 KOKC	AA2473
FPUS3 KBHM	AA4543	FPUS3 KOMA	AA7497
FPUS3 KBIS	AA7564	FPUS3 KPDX	AA7267
FPUS3 KBOI	AA7261	FPUS3 KPHL	AA1050
FPUS3 KBOS	AA5553	FPUS3 KPHX	AA6706
FPUS3 KBRO		FPUS3 KPIT	AA2474
FPUS3 KBUF	AA5507	FPUS3 KPWM	AA1052
FPUS3 KCAE	AA2435	FPUS3 KRDU	AA2002
FPUS3 KCHI	AA7424	FPUS3 KRNO	AA9061
FPUS3 KCLE	AA2443	FPUS3 KSAT	AA2822
FPUS3 KCRW	AA2001	FPUS3 KSDF	AA7563
FPUS3 KCYS	AA7565	FPUS3 KSEA	AA6568
FPUS3 KDEN	AA7570	FPUS3 KSFO	AA6575
FPUS3 KDSM	AA7498	FPUS3 KSLC	AA6572
FPUS3 KFSD	AA7550	FPUS3 KSTL	AA7561
FPUS3 KFTW	AA4263	FPUS3 KTBW	
FPUS3 KGTF	AA6570	FPUS3 KTOP	AA7551
FPUS3 KIND	AA7421	FPUS3 KTUL	AA2206
FPUS3 KJAN	AA9570	FPUS3 KWBC	AA8559

HPC's Quantitative Precipitation Forecast Discussions

Produced by NCEP's HPC three times a day, available around 0700, 1100, and 1900 UTC.

MANOP Header	AWDS PID
FXUS4 KWBC	AA2172

AFGWC's MWA Forecast Discussion for Europe

Produced by AFGWC's European Region Forecast Branch three times a day, available around 0200, 1000, and 1800 UTC. *Bulletin to be available after 17 Dec 96.*

MANOP Header **AWDS PID**
PDEU43 KGWC AA3790

This discussion message refers to the Military Weather Advisory (MWA) charts for Europe, also available after 0200, 1000, and 1800 UTC, and distributed over AWDS as vector graphic products. The AWDS PIDs, database times (DBT), and product legends are provided below.

AWDS PID	DBT	Product Legend
GVWWEU0T94	0000	EUROPE MWA TSTMS ADVISORY
GVWWEU8Z94	0000	EUROPE MWA WND/PRECIP ADVISORY
GVWWEU3T94	0900	EUROPE MWA TSTMS ADVISORY
GVWWEUBZ94	0900	EUROPE MWA WND/PRECIP ADVISORY
GVWWEU5T94	1500	EUROPE MWA TSTMS ADVISORY
GVWWEUDZ94	1500	EUROPE MWA WND/PRECIP ADVISORY

AFGWC's MWA Forecast Discussion for the CONUS

Produced by AFGWC's Americas Region Forecast Branch four times a day, available after 0400, 1000, 1600, and 2200 UTC.

MANOP Header **AWDS PID**
PDUS43 KGWC AA0870

These discussion messages refer to the Military Weather Advisory charts for the CONUS, also available after 0400, 1000, 1600, and 2200 UTC, and distributed over AWDS as vector graphic products. The AWDS PIDs, database times (DBT), and product legends are provided below.

AWDS PID	DBT	Product Legend
GVWWUS0T94	0000	CONUS MWA TSTMS ADVISORY
GVWWUS0Z94	0000	CONUS MWA WND/PRECIP ADVISORY
GVWWUS2T94	0600	CONUS MWA TSTMS ADVISORY
GVWWUS2Z94	0600	CONUS MWA WND/PRECIP ADVISORY
GVWWUS4T94	1200	CONUS MWA TSTMS ADVISORY
GVWWUS4Z94	1200	CONUS MWA WND/PRECIP ADVISORY
GVWWUS6T94	1800	CONUS MWA TSTMS ADVISORY
GVWWUS6Z94	1800	CONUS MWA WND/PRECIP ADVISORY

AFGWC's MWA Outlook for the CONUS

Produced by AFGWC's Americas Region Forecast Branch twice a day, available around 0100 and 1300 UTC.

MANOP Header	AWDS PID
PDUS44 KGWC	AA0670

This bulletin message refers to the Military Weather Advisory Outlook charts for the CONUS, available after 0100 and 1300 UTC, distributed over AWDS as vector graphic products. The AWDS PIDs, database times (DBT), and product legends are provided below.

AWDS PID	DBT	Product Legend
GVWWUS2T98	0600	CONUS MWA TSTMS ADVISORY DAY 2
GVWWUS2Z98	0600	CONUS MWA WND/PRECIP ADVISORY DAY 2
GVWWUS6T98	1800	CONUS MWA TSTMS ADVISORY DAY 2
GVWWUS6Z98	1800	CONUS MWA WND/PRECIP ADVISORY DAY 2

JTWC's Western Pacific Tropical Cyclone Discussions

JTWC issues these bulletins (one header per cyclone) after the first warning, then twice a day during the life of the cyclone. They should be available after 0000 and 1200 UTC.

MANOP Header	AWDS PID
WDPN31 PGTW	AA5123
WDPN32 PGTW	AA5207
WDPN33 PGTW	AA5231
WDPN34 PGTW	AA5301
WDPN35 PGTW	AA5498
WDPN36 PGTW	AA4974
WDPN37 PGTW	AA6390

NHC's Atlantic Tropical Cyclone Discussion

NHC issues these bulletins (one header per cyclone) after the first warning, then four times daily during the life of the cyclone. They should be available after 0300, 0900, 1500, and 2100 UTC.

MANOP Header	AWDS PID
WTNT41 KHNC	AA2063
WTNT42 KHNC	AA2070
WTNT43 KHNC	AA2077
WTNT44 KHNC	AA2079
WTNT45 KHNC	AA2084

CPHC's Central Pacific Tropical Cyclone Discussion

CPHC issues these bulletins (one header per cyclone) after the first warning, then four times a day during the life of the cyclone. They should be available after 0300, 0900, 1500, and 2100 UTC.

MANOP Header	AWDS PID
WTPA41 PHNL	AA3170
WTPA42 PHNL	AA3172
WTPA43 PHNL	AA3208
WTPA44 PHNL	AA3233
WTPA45 PHNL	AA3426

NHC's Eastern Pacific Tropical Cyclone Discussion

NHC issues these bulletins (one header per cyclone) after the first warning, then four times a day during the life of the cyclone. They should be available after 0300, 0900, 1500, and 2100 UTC.

MANOP Header	AWDS PID
WTPZ41 KHNC	AA2093
WTPZ42 KHNC	AA2102
WTPZ43 KHNC	AA2105
WTPZ44 KHNC	AA2113
WTPZ45 KHNC	AA2120

SPC's Hazardous Weather Update for the CONUS

Produced by NCEP's SPC forecasters, this is an experimental, plain-language product aimed mainly at emergency managers and the media, describing the forecast conditions in the next 6 hours associated with a specific weather system in the CONUS. Hazardous Weather Updates (HWU) are issued roughly every 6 hours as conditions warrant. The HWU is issued not just for areas of severe thunderstorms, but for other weather hazards as well, including heavy rain and flooding, winter storms, large areas of high winds, extreme heat, and extreme cold. The HWU does not deal with landfalling tropical cyclones as long as advisories are still being issued by the National Hurricane Center. In May 97, the NWS will decide whether to make this a permanent, vice experimental, product.

MANOP Header	AWDS PID
WWUS44 KMKC	

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

FYIs

FYI #9:	MOS Guidance	Nov 92
FYI #10:	Technical Improvement	Nov 92
FYI #11:	Commanders WX Info Pamphlet	Nov 92
FYI #12:	TAFVER	Nov 92
FYI #14:	Fixed Meteorological Equipment	Feb 93
FYI #16:	RVR-2	Feb 93
FYI #17:	Lightning Detection System	Feb 93
FYI #21:	Medium-Range Forecast (MRF) Based Objective Forecast Message (OFM)	Jul 93
FYI #22:	TAFVER II Statistical Output	Sep 93
FYI #23:	Conditional Climatology (CC) Tables	Sep 93
FYI #24:	A Layman's Guide To Developing A Forecast Study	Jan 94
FYI #27:	Weather Staff Officer's Guide To Climatology	Mar 94
FYI #29:	SHARP	Aug 94
FYI #30:	Air Force Weather Bulletin Board	Aug 95
FYI #32:	Freezing Drizzle	Feb 96
FYI #33:	Turbulence	Apr 96
FYI #34:	Continuation Training	Jul 96
FYI #35:	Metsat Program	Aug 96
FYI #36:	Forecast Discussion Bulletins	Dec 96

Superseded FYIs and FYIs maintained by CWC are not listed.

Numerical Weather Applications Homepages

HQ AWS/XON

Numerical Weather Applications Homepage

http://infosphere.safb.af.mil/users/aws/public_www/public/aws/hqaws/xon/numerica.htm

National Center for Environmental Prediction (NCEP) Homepage

<http://www.ncep.noaa.gov/>

AFGWC Homepage

<http://afwin.offutt.af.mil:443/>